

(FILE 'HOME' ENTERED AT 13:41:47 ON 11 MAR 1999)

FILE 'ADISALERTS, ADISINSIGHT, AGRICOLA, AIDSLINE, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHDS, CABA, CANCERLIT, CAPLUS, CEABA, CEN, CIN, CONFSCI, CROPB, CROPU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, EMBAL, EMBASE, FROSTI, ...' ENTERED AT 13:42:28 ON 11 MAR 1999

L1 90 S DAF(10A)TGF  
L2 42 DUP REM L1 (48 DUPLICATES REMOVED)  
L3 42 DUP REM L2 (0 DUPLICATES REMOVED)  
L4 11 S L3 AND DAF(A)7

=> d 14 1-11 ti au so ab

L4 ANSWER 1 OF 11 BIOSIS COPYRIGHT 1999 BIOSIS  
TI The fork head transcription factor DAF-16 transduces insulin-like metabolic and longevity signals in *C. elegans*.  
AU Ogg, Scott; Paradis, Suzanne; Gottlieb, Shoshanna; Patterson, Garth I.; Lee, Linda; Tissenbaum, Heidi A.; Ruvkun, Gary (1)  
SO Nature (London), (Oct. 30, 1997) Vol. 389, No. 6654, pp. 994-999.  
ISSN: 0028-0836.  
AB In mammals, insulin signalling regulates glucose transport together with the expression and activity of various metabolic enzymes. In the nematode *Caenorhabditis elegans*, a related pathway regulates metabolism, development and longevity. Wild-type animals enter the developmentally arrested dauer stage in response to high levels of a secreted pheromone, accumulating large amounts of fat in their intestines and hypodermis. Mutants in DAF-2 (a homologue of the mammalian insulin receptor) and AGE-1 (a homologue of the catalytic subunit of mammalian phosphatidylinositol 3-OH kinase) arrest development at the dauer stage. Moreover, animals bearing weak or temperature-sensitive mutations in daf-2 and age-1 can develop reproductively, but nevertheless show increased energy storage and longevity. Here we show that null mutations in daf-16 suppress the effects of mutations in daf-2 or age-1; lack of daf-16 bypasses the need for this insulin receptor-like signalling pathway. The principal role of DAF-2/AGE-1 signalling is thus to antagonize DAF-16. daf-16 is widely expressed and encodes three members of the Fork head family of transcription factors. The DAF-2 pathway acts synergistically with the pathway activated by a nematode TGF-beta-type signal, DAF-7, suggesting that DAF-16 cooperates with nematode SMAD proteins in regulating the transcription of key metabolic and developmental control genes. The probable human orthologues of DAF-16, FKHR and AFX, may also act downstream of insulin signalling and cooperate with TGF-beta effectors in mediating metabolic regulation. These genes may be dysregulated in diabetes.

L4 ANSWER 2 OF 11 BIOSIS COPYRIGHT 1999 BIOSIS  
TI The DAF-3 Smad protein antagonizes TGF-beta-related receptor signaling in the *Caenorhabditis elegans* dauer pathway.  
AU Patterson, Garth I.; Koweeek, Allison; Wong, Arthur; Liu, Yanxia; Ruvkun, Gary (1)  
SO Genes & Development, (1997) Vol. 11, No. 20, pp. 2679-2690.  
ISSN: 0890-9369.  
AB Signals from TGF-beta superfamily receptors are transduced to the nucleus by Smad proteins, which transcriptionally activate target genes. In *Caenorhabditis elegans*, defects in a TGF-beta-related pathway cause a reversible developmental arrest and metabolic shift at the dauer larval stage. Null mutations in daf-3 suppress mutations in genes encoding this TGF-beta signal, its receptors, and associated Smad signal transduction proteins. daf-3 encodes a Smad protein that is most closely related to mammalian DPC4, and is expressed throughout development in many of the tissues that are remodeled during dauer development. DAF-4, the type II TGF-beta receptor in this pathway, is also expressed in remodeled tissues. These data suggest that the DAF-7 signal from sensory neurons acts as a neuroendocrine signal throughout the body to directly regulate developmental and metabolic shifts in tissues that are remodeled during dauer formation. A full-length functional DAF-3/GFP fusion protein is predominantly cytoplasmic, and this localization is independent of activity of the upstream TGF-beta-related pathway. However, this fusion protein is associated with chromosomes in mitotic cells, suggesting that DAF-3 binds DNA directly or indirectly. DAF-3 transgenes also interfere with dauer formation, perhaps attributable to a dosage effect. A truncated

DAF-3/GFP fusion protein that is predominantly nuclear interferes with dauer formation, implying a role for DAF-3 in the nucleus. The data suggest that DAF-7 signal transduction antagonizes or modifies DAF-3 Smad activity in the nucleus to induce reproductive development; when DAF-7 signals are disabled, unmodified DAF-3 Smad activity mediates dauer arrest and its associated metabolic shift. Therefore, daf-3 is unique in that it is antagonized, rather than activated, by a TGF-beta pathway.

L4 ANSWER 3 OF 11 BIOSIS COPYRIGHT 1999 BIOSIS  
TI Control of *C. elegans* larval development by neuronal expression of a TGF-beta homolog.  
AU Ren, Peifeng; Lim, Chang-Su; Johnsen, Robert; Albert, Patrice S.; Pilgrim, David; Riddle, Donald L. (1)  
SO Science (Washington D C), (1996) Vol. 274, No. 5291, pp. 1389-1391.  
ISSN: 0036-8075.  
AB The *Caenorhabditis elegans* dauer larva is specialized for dispersal without growth and is formed under conditions of overcrowding and limited food. The *daf-7* gene, required for transducing environmental cues that support continuous development with plentiful food, encodes a transforming growth factor-beta (TGF-beta) superfamily member. A *daf-7* reporter construct is expressed in the ASI chemosensory neurons. Dauer-inducing pheromone inhibits *daf-7* expression and promotes dauer formation, whereas food reactivates *daf-7* expression and promotes recovery from the dauer state. When the food/pheromone ratio is high, the level of *daf-7* mRNA peaks during the L1 larval stage, when commitment to non-dauer development is made.

L4 ANSWER 4 OF 11 CAPLUS COPYRIGHT 1999 ACS  
TI Therapeutic and diagnostic tools for impaired glucose tolerance conditions based on the dauer polypeptides and genes of *Caenorhabditis elegans*  
IN Ruvkun, Gary; Kimura, Koutarou; Patterson, Garth; Ogg, Scott; Paradis, Suzanne; Tissenbaum, Heidi; Morris, Jason; Kowek, Allison; Pierce, Sarah  
SO PCT Int. Appl., 202 pp.  
CODEN: PIXXD2  
AB Disclosed herein are novel genes and methods for the screening of therapeutics useful for treating impaired glucose tolerance conditions, as well as diagnostics and therapeutic compns. for identifying or treating such conditions. The *Caenorhabditis elegans* metabolic regulatory genes *daf-2* and *age-1* encode homologs of the mammalian insulin receptor/phosphoinositide 3-kinase signaling pathway proteins, resp. In addn., the DAF-16 forkhead protein represents the major transcriptional output of this insulin signaling pathway. Dysregulation of the DAF-16 transcription factor in the absence of insulin signaling leads to metabolic defects; inactivation of DAF-16 reverses the metabolic defects caused by lack of insulin signaling in *C. elegans*. Finally, the *C. elegans* *daf-7*, *da-1*, *daf-4*, *daf-8*, *daf-14*, and *daf-3* genes encode neuroendocrine/target tissue transforming growth factor-beta. type signal transduction mols. that genetically interact with the insulin signaling pathway. Metabolic defects cause by lack of neuroendocrine TGF-.beta. signals can be reversed by inactivation of the DAF-3 transcription factor. The *C. elegans* *daf* genes are excellent candidate genes and proteins for human disease assocd. with glucose intolerance, e.g., diabetes, obesity, and atherosclerosis. The human homologs of these *daf* genes and proteins mediate insulin signaling in normal people and may be defective or mis-regulated in diabetics. Moreover, there are at least 2 classes of type II diabetics: those with defects in the TGF-.beta. signaling genes, and those with defects in insulin signaling genes. Exemplary sequences and functional characteristics are provided for the *C. elegans* *daf* homologs of the human genes: *daf-2*, *daf-3* (3 differentially spliced isoforms), *daf-16* (2 differentially spliced isoforms), *age-1*, and *pdk-1* (two spliced isoforms).

L4 ANSWER 5 OF 11 CAPLUS COPYRIGHT 1999 ACS  
TI Chemosensory neurons function in parallel to mediate a pheromone response in *C. elegans*  
AU Schackwitz, Wendy S.; Inoue, Takao; Thomas, James H.  
SO Neuron (1996), 17(4), 719-728  
CODEN: NERNET; ISSN: 0896-6273  
AB The formation of the *C. elegans* dauer larva is repressed by the chemosensory neurons ADF, ASI, and ASG. Mutant anal. has defined two parallel genetic pathways that control dauer formation. By killing neurons in these mutants, the authors show that mutations in one of these genetic pathways disrupt dauer repression by ADF, ASI, and ASG. One gene in this pathway is *daf-7*, which encodes a TGF-.beta.-related protein. The authors find that *daf-7* :: GFP fusions are expressed specifically in ASI and that expression is regulated by dauer-inducing sensory stimuli. The authors also show that a different chemosensory neuron, ASJ, functions in parallel to these neurons to induce dauer formation. Mutations in the second genetic pathway

activate dauer formation in an ASJ-dependent manner. Thus, the genetic redundancy in this process is reflected at the neuronal level.

L4 ANSWER 6 OF 11

GENBANK.RTM. COPYRIGHT 1999

TITLE (TI): The DAF-3 Smad protein antagonizes DAF-7 TGF-beta receptor signalling in the *C. elegans* dauer pathway  
AUTHOR (AU): Direct Submission Patterson, G.; Kowek, A.; Wong, A.; Liu, Y.; Ruvkun, G.  
AUTHOR (AU): Patterson, G.I.; Kowek, A.R.; Ruvkun, G.; Thatcher, J.; Okkema, P.  
JOURNAL (SO): Unpublished  
JOURNAL (SO): Submitted (23-MAY-1997) Molecular Biology, Massachusetts General Hospital, MGH/50 Blossom Street/Wellman 8, Boston, MA 02114, USA

L4 ANSWER 7 OF 11

GENBANK.RTM. COPYRIGHT 1999

TITLE (TI): The DAF-3 Smad protein antagonizes DAF-7 TGF-beta receptor signalling in the *C. elegans* dauer pathway  
AUTHOR (AU): Direct Submission Patterson, G.; Kowek, A.; Wong, A.; Liu, Y.; Ruvkun, G.  
AUTHOR (AU): Patterson, G.I.; Kowek, A.R.; Ruvkun, G.; Thatcher, J.; Okkema, P.  
JOURNAL (SO): Unpublished  
JOURNAL (SO): Submitted (23-MAY-1997) Molecular Biology, Massachusetts General Hospital, MGH/50 Blossom Street/Wellman 8, Boston, MA 02114, USA

L4 ANSWER 8 OF 11

GENBANK.RTM. COPYRIGHT 1999

TITLE (TI): The DAF-3 Smad protein antagonizes DAF-7 TGF- $\beta$  receptor signalling in the *C. elegans* dauer pathway  
AUTHOR (AU): Direct Submission Patterson, G.I.; Kowek, A.R.; Wong, A.; Liu, Y.; Ruvkun, G.  
AUTHOR (AU): Patterson, G.I.; Kowek, A.R.; Ruvkun, G.; Thatcher, J.; Okkema, P.  
JOURNAL (SO): Unpublished  
JOURNAL (SO): Submitted (23-MAY-1997) Molecular Biology, Massachusetts General Hospital, MGH/50 Blossom Street/Wellman 8, Boston, MA 02114, USA

L4 ANSWER 9 OF 11

GENBANK.RTM. COPYRIGHT 1999

TITLE (TI): Control of *C. elegans* larval development by neuronal expression of a TGF-beta homolog  
AUTHOR (AU): Direct Submission Ren, P.; Lim, C.S.; Johnsen, R.; Albert, P.S.; Pilgrim, D.; Riddle, D.L.  
AUTHOR (AU): Ren, P.; Lim, C.-S.; Johnsen, R.; Albert, P.S.; Pilgrim, D.; Riddle, D.L.  
JOURNAL (SO): Science, 274 (5291), 1389-1391 (1996)  
JOURNAL (SO): Submitted (30-SEP-1996) Biological Sciences, University of Missouri, 310 Tucker Hall, Columbia, Missouri 65211, USA

L4 ANSWER 10 OF 11

GENBANK.RTM. COPYRIGHT 1999

TITLE (TI): Control of *C. elegans* larval development by neuronal expression of a TGF-beta homolog  
TITLE (TI): Direct Submission  
AUTHOR (AU): Ren, P.; Lim, C.S.; Johnsen, R.; Albert, P.S.; Pilgrim, D.; Riddle, D.L.  
AUTHOR (AU): Ren, P.; Lim, C.-S.; Johnsen, R.; Albert, P.S.; Pilgrim, D.; Riddle, D.L.  
JOURNAL (SO): Science, 274 (5291), 1389-1391 (1996)  
JOURNAL (SO): Submitted (26-SEP-1996) Biological Sciences, University of Missouri, 311 Tucker Hall, Columbia, MO 65211, USA

L4 ANSWER 11 OF 11 TOXLIT

TI Therapeutic and diagnostic tools for impaired glucose tolerance conditions based on the dauer polypeptides and genes of *Caenorhabditis elegans*.

AU Ruvkun G; Kimura K; Patterson G; Ogg S; Paradis S; Tissenbaum H; Morris J; Kowek A; Pierce S

SO (1998). PCT Int. Appl. PATENT NO. 9851351 11/19/1998 (The General Hospital Corporation).

CODEN: PIXXD2.

AB Disclosed herein are novel genes and methods for the screening of therapeutics useful for treating impaired glucose tolerance conditions, as

well as diagnostics and therapeutic compns. for identifying or treating such conditions. The *C. elegans* metabolic regulator genes *daf-2* and *age-1* encode homologs of the mammalian insulin receptor/phosphoinositide 3-kinase signaling pathway proteins, resp. In addn., the DAF-16 forkhead protein represents the major transcriptional output of this insulin signaling pathway. Dysregulation of the DAF-16 transcription factor in the absence of insulin signaling leads to metabolic defects; inactivation of DAF-16 reverses the metabolic defects caused by lack of insulin signaling in *C. elegans*. Finally, the *C. elegans* *daf-7*, *da-1*, *daf-4*, *daf-8*, *daf-14*, and *daf-3* genes encode neuroendocrine/target tissue transforming growth factor- $\beta$  type signal transduction mols. that genetically interact with the insulin signaling pathway. Metabolic defects cause by lack of neuroendocrine TGF- $\beta$  signals can be reversed by inactivation of the DAF-3 transcription factor. The *C. elegans* *daf* genes are excellent candidate genes and proteins for human disease assocd. with glucose intolerance, e.g., diabetes, obesity, and atherosclerosis. The human homologs of these *daf* genes and proteins mediate insulin signaling in normal people and may be defective or mis-regulated in diabetics. Moreover, there are at least 2 classes of type II diabetics: those with defects in the TGF- $\beta$  signaling genes, and those with defects in insulin signaling genes. Exemplary sequences and functional characteristics are provided for the *C. elegans* *daf* homologs of the human genes: *daf-2*, *daf-3* (3 differentially spliced isoforms), *daf-16* (2 differentially spliced isoforms), *age-1*, and *pdk-1* (two spliced isoforms).

FILE 'CAPLUS, SCISEARCH, MEDLINE, BIOSIS' ENTERED AT 09:34:19 ON 12 MAR  
1999

L1 38 S IMPAIRED GLUCOSE INTOLERANCE  
L2 23 DUP REM L1 (15 DUPLICATES REMOVED)  
L3 1360 S TROGLITAZONE  
L4 0 S L3 AND DAF  
L5 87 S L3 AND ATHEROSCLEROSIS  
L6 42 DUP REM L5 (45 DUPLICATES REMOVED)  
L7 6 S L6 AND OBESITY  
L8 42 SORT L6 PY

=> d 18 19 all

L8 ANSWER 19 OF 42 CAPLUS COPYRIGHT 1999 ACS  
AN 1998:164910 CAPLUS  
DN 128:303813  
TI **Troglitazone** suppresses intimal formation following balloon  
injury in insulin-resistant Zucker fatty rats  
AU Shinohara, Etsuko; Kihara, Shinji; Ouchi, Noriyuki; Funahashi, Tohru;  
Nakamura, Tadashi; Yamashita, Shizuya; Kameda-Takemura, Kaoru; Matsuzawa,  
Yuji  
CS Suita, Yamadaoka, 2-2, Second Department of Internal Medicine, Osaka  
University Medical School, Osaka, 565, Japan  
SO Atherosclerosis (Shannon, Irel.) (1998), 136(2), 275-279  
CODEN: ATHSBL; ISSN: 0021-9150  
PB Elsevier Science Ireland Ltd.  
DT Journal  
LA English  
CC 1-8 (Pharmacology)  
AB **Troglitazone**, a thiazolidinedione deriv., overcomes insulin  
resistance through promoting insulin receptor function. However, the  
effect of the resultant enhancement of insulin action on the regulation of  
cellular proliferation remains unknown. We investigated the effect of  
**troglitazone** on intimal proliferation after balloon injury in  
insulin-resistant Zucker fatty rats. **Troglitazone** markedly  
decreased blood glucose and triglyceride levels at the therapeutic dosage.  
The area of neointima significantly decreased in treated animals 2 wk  
after operation, as compared with the untreated control animals  
(0.0526.+-0.0292 and 0.115.+-0.0354 mm<sup>2</sup>, resp.). The ratio of  
neointimal to medial area in treated rats (0.75.+-0.26) decreased by as  
much as 53% compared with untreated rats (1.40.+-0.05). We next examd.  
DNA synthesis in cultured smooth muscle cells (SMCs) derived from  
non-insulin-resistant rats, to assess whether **troglitazone**  
suppresses the proliferation of vascular SMCs independent of metabolic  
effects. The result showed that **troglitazone** decreased  
[methyl-<sup>3</sup>H]thymidine incorporation into DNA. In conclusion, treatment  
with **troglitazone** in Zucker fatty rats resulted in a redn. in  
neointima formation after balloon injury, and also cor.  
hypertriglyceridemia and hyperglycemia. In addn., in vitro studies  
revealed that the anti-proliferative effect of **troglitazone**  
stems from its direct action on DNA synthesis rather than any accompanying  
metabolic changes. Therefore, **troglitazone** seems to be  
applicable in preventing **atherosclerosis** in patients with  
insulin resistance.  
ST **troglitazone** atherosclerosis insulin resistance  
neointima  
IT Artery  
    (intima; **troglitazone** suppresses intimal formation following  
    balloon injury in insulin-resistant rats)  
IT Antiatherosclerotics  
Cell proliferation  
DNA formation  
Insulin resistance  
    (**troglitazone** suppresses intimal formation following balloon  
    injury in insulin-resistant rats)  
IT 97322-87-7, **Troglitazone**  
RL: BAC (Biological activity or effector, except adverse); THU  
(Therapeutic use); BIOL (Biological study); USES (Uses)  
    (**troglitazone** suppresses intimal formation following balloon  
    injury in insulin-resistant rats)  
IT 9004-10-8, Insulin, biological studies  
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU  
(Occurrence)

FILE 'USPAT' ENTERED AT 16:29:11 ON 10 MAR 1999

E RUVKUN G?/IN  
E RUVKUN GARRY/IN

L1 0 S E3  
L2 0 S DAF-7  
L3 270 S C ELEGANS  
L4 9 S L3 AND DAF  
L5 18 S L3 AND ATHEROSCLERO?  
L6 6681 S ATHEROSCLERO?  
L7 18 S L6 AND C ELEGANS  
L8 59 S L3 AND INSULIN  
L9 10 S L8 AND OBESITY

=> d 19 1 cIT AB

1. 5,876,919, Mar. 2, 1999, Methods for identifying compounds that bind to a mammalian tub protein; Patrick W. Kleyn, et al., 435/4; 530/350 [IMAGE AVAILABLE]

US PAT NO: 5,876,919 [IMAGE AVAILABLE]

L9: 1 of 10

ABSTRACT:

The present invention relates to the identification of novel nucleic acid molecules and proteins encoded by such nucleic acid molecules or degenerate variants thereof, that participate in the control of mammalian body weight. The nucleic acid molecules of the present invention represent the genes corresponding to the mammalian tub gene, a gene that is involved in the regulation of body weight.

(FILE 'HOME' ENTERED AT 09:33:10 ON 12 MAR 1999)

FILE 'CAPLUS, SCISEARCH, MEDLINE, BIOSIS' ENTERED AT 09:34:19 ON 12 MAR 1999

L1 38 S IMPAIRED GLUCOSE INTOLERANCE  
L2 23 DUP REM L1 (15 DUPLICATES REMOVED)  
L3 1360 S TROGLITAZONE  
L4 0 S L3 AND DAF  
L5 87 S L3 AND ATHEROSCLEROSIS  
L6 42 DUP REM L5 (45 DUPLICATES REMOVED)  
L7 6 S L6 AND OBESITY  
L8 42 SORT L6 PY  
L9 0 S L3 AND ELAGANS  
L10 0 S DAF(W)7 AND L3  
L11 41 S DAF(W)7  
L12 17 DUP REM L11 (24 DUPLICATES REMOVED)  
L13 17 SORT L12 PY

=> d 113 1-17 ti so

L13 ANSWER 1 OF 17 CAPLUS COPYRIGHT 1999 ACS  
TI The *Caenorhabditis elegans* *daf-7* gene encodes a novel member of the transforming growth factor-.beta. superfamily  
SO (1993) 104 pp. Avail.: Univ. Microfilms Int., Order No. DA9423983  
From: Diss. Abstr. Int. B 1994, 55 (4), 1304

L13 ANSWER 2 OF 17 CAPLUS COPYRIGHT 1999 ACS  
TI Evidence for parallel processing of sensory information controlling dauer formation in *Caenorhabditis elegans*  
SO Genetics (1993), 134(4), 1105-17  
CODEN: GENTAE; ISSN: 0016-6731

L13 ANSWER 3 OF 17 CAPLUS COPYRIGHT 1999 ACS  
TI The genetic and RFLP characterization of the left end of linkage group III in *Caenorhabditis elegans*  
SO Genome (1993), 36(4), 712-24  
CODEN: GENOE3; ISSN: 0831-2796

L13 ANSWER 4 OF 17 CAPLUS COPYRIGHT 1999 ACS  
TI Derivatives of 2-nitrofluorene causes change of human sperm motility  
SO Pharmacol. Toxicol. (Copenhagen) (1994), 75(5), 310-14  
CODEN: PHTOEH; ISSN: 0901-9928

L13 ANSWER 5 OF 17 CAPLUS COPYRIGHT 1999 ACS  
TI Genes that regulate both development and longevity in *Caenorhabditis elegans*  
SO Genetics (1995), 139(4), 1567-83  
CODEN: GENTAE; ISSN: 0016-6731

L13 ANSWER 6 OF 17 CAPLUS COPYRIGHT 1999 ACS  
TI Control of *C. elegans* larval development by neuronal expression of a TGF-.beta. homolog  
SO Science (Washington, D. C.) (1996), 274(5291), 1389-1391  
CODEN: SCIEAS; ISSN: 0036-8075

L13 ANSWER 7 OF 17 CAPLUS COPYRIGHT 1999 ACS  
TI Chemosensory neurons function in parallel to mediate a pheromone response in *C. elegans*  
SO Neuron (1996), 17(4), 719-728  
CODEN: NERNET; ISSN: 0896-6273

L13 ANSWER 8 OF 17 CAPLUS COPYRIGHT 1999 ACS  
TI The DAF-3 Smad protein antagonizes TGF-.beta.-related receptor signaling in the *Caenorhabditis elegans* dauer pathway  
SO Genes Dev. (1997), 11(20), 2679-2690  
CODEN: GEDEEP; ISSN: 0890-9369

L13 ANSWER 9 OF 17 CAPLUS COPYRIGHT 1999 ACS  
TI The Fork head transcription factor DAF-16 transduces insulin-like metabolic and longevity signals in *C. elegans*  
SO Nature (London) (1997), 389(6654), 994-999  
CODEN: NATUAS; ISSN: 0028-0836

L13 ANSWER 10 OF 17 CAPLUS COPYRIGHT 1999 ACS  
TI Therapeutic and diagnc tools for impaired glucose tolerance conditions  
based on the dauer pol tides and genes of *Caenorhabditis elegans*  
SO PCT Int. Appl., 202 pp.  
CODEN: PIXXD2

L13 ANSWER 11 OF 17 BIOSIS COPYRIGHT 1999 BIOSIS  
TI DAUER CONSTITUTUTIVE MUTATIONS OF *CAENORHABDITIS-ELEGANS* ENHANCE TEMPERATURE  
SENSITIVE DAUER LARVA FORMATION OF THE WILD TYPE STRAIN.  
SO 52ND ANNUAL MEETING OF THE GENETICS SOCIETY OF AMERICA MEETING JOINTLY  
WITH THE SOCIETY FOR THE STUDY OF EVOLUTION, THE AMERICAN SOCIETY OF  
NATURALISTS, AND THE STADLER GENETICS SYMPOSIUM, ST. LOUIS, MO., USA, JUNE  
12-16, 1983. GENETICS. (1983) 104 (1 PART 2), S28-S29.  
CODEN: GENTAE. ISSN: 0016-6731.

L13 ANSWER 12 OF 17 MEDLINE  
TI A pheromone-induced developmental switch in *Caenorhabditis elegans*:  
Temperature-sensitive mutants reveal a wild-type temperature-dependent  
process.  
SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF  
AMERICA, (1984 Feb) 81 (3) 819-23.  
Journal code: PV3. ISSN: 0027-8424.

L13 ANSWER 13 OF 17 MEDLINE  
TI Chemosensory regulation of development in *C. elegans*.  
SO BIOESSAYS, (1993 Dec) 15 (12) 791-7. Ref: 28  
Journal code: 9YY. ISSN: 0265-9247.

L13 ANSWER 14 OF 17 MEDLINE  
TI Expression of a *Drosophila melanogaster* amber suppressor tRNA(Ser) in  
*Caenorhabditis elegans*.  
SO MOLECULAR AND GENERAL GENETICS, (1993 Oct) 241 (1-2) 26-32.  
Journal code: NGP. ISSN: 0026-8925.

L13 ANSWER 15 OF 17 MEDLINE  
TI Aging. Stopping the clock.  
SO CURRENT BIOLOGY, (1994 Feb 1) 4 (2) 151-3. Ref: 12  
Journal code: B44. ISSN: 0960-9822.

L13 ANSWER 16 OF 17 BIOSIS COPYRIGHT 1999 BIOSIS  
TI The *C. elegans* *daf-7* genes encodes a new member of the  
transforming growth factor-beta superfamily that is a putative ligand for  
the *daf-1* receptor.  
SO Journal of Cellular Biochemistry Supplement, (1994) Vol. 0, No. 18B, pp.  
244.  
Meeting Info.: Keystone Symposium on Transmembrane Signal Transduction:  
Structure, Mechanisms, Regulation of Evolution Keystone, Colorado, USA  
February 6-13, 1994  
ISSN: 0733-1959.

L13 ANSWER 17 OF 17 SCISEARCH COPYRIGHT 1999 ISI (R)  
TI A hypothesis for the tissue specificity of nematode parasites  
SO EXPERIMENTAL PARASITOLOGY, (MAY 1998) Vol. 89, No. 1, pp. 140-142.  
Publisher: ACADEMIC PRESS INC JNL-COMP SUBSCRIPTIONS, 525 B ST, STE 1900,  
SAN DIEGO, CA 92101-4495.  
ISSN: 0014-4894.

=> d 113 12 all

L13 ANSWER 12 OF 17 MEDLINE  
AN 84144794 MEDLINE  
DN 84144794  
TI A pheromone-induced developmental switch in *Caenorhabditis elegans*:  
Temperature-sensitive mutants reveal a wild-type temperature-dependent  
process.  
AU Golden J W; Riddle D L  
NC NOI-AG-9-2113 (NIA)  
HD11239 (NICHD)  
HD00367 (NICHD)  
+  
SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF  
AMERICA, (1984 Feb) 81 (3) 819-23.  
Journal code: PV3. ISSN: 0027-8424.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals; Cancer Journals  
EM 198406  
AB Formation of a developmentally arrested dispersal stage called the dauer  
larva is enhanced by a *Caenorhabditis*-specific pheromone and is inhibited  
by increasing amounts of food. Pheromone-induced dauer larva formation of

three tested wild-type strains is temperature-dependent, so that an increased percentage of the population forms dauer larvae at 25 degrees C compared to lower temperatures. Dauer-defective mutants fail to respond to added pheromone, and some behavioral mutants affected in thermotaxis or egg-laying also exhibit abnormal responses. Temperature-sensitive (ts) dauer-constitutive mutants form dauer larvae at a restrictive temperature regardless of environmental stimuli. At the permissive temperature (17.5 degrees C), alleles of six out of seven dauer-constitutive genes tested overrespond to the dauer-inducing pheromone. All known mutations in **daf-4** (eight alleles) and **daf-7** (five alleles) produce a ts dauer-constitutive phenotype. One **daf-4** and one **daf-7** allele are suppressed by the amber nonsense suppressor, **sup-7(st5)**. At least these two dauer-constitutive mutations are likely to cause production of nonfunctional rather than ts gene products. These mutations appear to indirectly result in a ts phenotype by enhancing the expression of a wild-type ts developmental process.

CT Check Tags: Animal; Female; Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.

Caenorhabditis: AH, anatomy & histology

\*Caenorhabditis: GE, genetics

Caenorhabditis: PH, physiology

Larva: PH, physiology

\*Mutation

Oviposition

Pheromones: IP, isolation & purification

\*Pheromones: PH, physiology

Temperature

CN 0 (Pheromones)

(FILE 'HOME' ENTERED AT 09:33:10 ON 12 MAR 1999)

FILE 'CAPLUS, SCISEARCH, MEDLINE, BIOSIS' ENTERED AT 09:34:19 ON 12 MAR 1999

L1 38 S IMPAIRED GLUCOSE INTOLERANCE  
L2 23 DUP REM L1 (15 DUPLICATES REMOVED)

=> d 12 6 8 ti so au ab

L2 ANSWER 6 OF 23 CAPLUS COPYRIGHT 1999 ACS DUPLICATE 2  
TI Troglitazone: review and assessment of its role in the treatment of patients with impaired glucose tolerance and diabetes mellitus  
SO Ann. Pharmacother. (1998), 32(3), 337-348  
CODEN: APHRER; ISSN: 1060-0280  
AU Johnson, Michael D.; Campbell, Lance K.; Campbell, R. Keith  
AB A review with 48 refs. To introduce troglitazone (CS-045, Rezulin), a new oral antidiabetic agent and discuss its pharmacol., therapeutics, pharmacokinetics, dosing guidelines, adverse effects, drug interactions, and clin. efficacy. A MEDLINE database search was completed to identify relevant articles including reviews, recent studies and abstrs., and data from Parke-Davis. Due to the small no. of published human studies available, some data are derived from animal studies and abstrs. of human studies. Studies and abstrs. chosen summarize the clin. action of troglitazone in healthy volunteers, in subjects with impaired glucose tolerance, and in patients with diabetes mellitus. Three of the six published human studies used subjects in a placebo-controlled, multicenter, randomized environment (type 2 diabetic patients or obese subjects with insulin resistance). All clin. trials available, including unpublished reports, were reviewed. Troglitazone is the first member of a new class of medications, the thiazolidinediones, to be approved for clin. use. Troglitazone increases insulin sensitivity in skeletal muscle and in hepatic and adipose tissue. It has been shown to decrease hepatic glucose output while having no effect on stimulating insulin secretion from the pancreatic beta-cells. Its metabolic effects decrease fasting and postprandial hyperglycemia, insulin concns., and triglyceride concns., while increasing high-d. lipoprotein concns. There is some evidence, based on short-term trials, that troglitazone causes only minimal decreases in glycosylated Hb AIC (HbAIC) concns. Data suggest that troglitazone decreases impaired glucose tolerance in nondiabetic obese subjects and leads to a redn. in both systolic and diastolic blood pressure in hypertensive type 2 diabetes mellitus patients. Troglitazone has a mild adverse effect profile, with rare instances of abnormal liver function tests. Troglitazone appears to be a safe, effective, and useful new agent in the treatment of insulin-requiring type 2 diabetes mellitus patients, although its HbAIC-lowering effects have been minimal in short-term trials, and its insulin dosage-redn. activity remains unclear. The Food and Drug Administration has also approved its use as monotherapy and in combination with sulfonylureas for patients with type 2 diabetes. It may have use in the treatment of patients with impaired glucose tolerance, but more clin. experience is needed before definitive conclusions can be made. The role of troglitazone therapy in diabetes mellitus and impaired glucose intolerance will continue to evolve as the results of studies and our clin. experience